

system for capturing an image by viewing the measurement position of the measurement object and the surrounding region from the front; and

the two dimensional imaging device comprises a two dimensional oblique image imaging device for photoelectrically converting an image obtained via the oblique image acquiring optical system and a two dimensional frontal image imaging device for photoelectrically converting an image obtained via the frontal image acquiring optical system;

the controller under the measurement mode being adapted to compute a desired displacement according to a video signal from the two dimensional oblique image imaging device while the controller under the observation mode is adapted to display the measurement point of the measurement object and the surrounding region according a video signal from the two dimensional frontal image imaging device.

18. (Amended) A displacement sensor according to claim 1, wherein the image acquiring optical system comprises an oblique image acquiring optical system for capturing an image by viewing the measurement position of the measurement object and a surrounding region from an oblique angle, and a frontal image acquiring optical system for capturing an image by viewing the measurement position of the measurement object and the surrounding region from the front;

the two dimensional imaging device is used commonly for the two image acquiring optical systems.

29. (Amended) A sensor head for an optical displacement sensor according to claim 25, further comprising shutter means for selectively shutting off one of a first light path reaching the two dimensional imaging device via the oblique image acquiring optical system and a second light path reaching the imaging device via the frontal image acquiring optical system in an alternative manner either manually or remotely.

30. (Amended) A sensor head for an optical displacement sensor according to claim 25, further comprising an illuminator for illuminating a measurement position of a measurement object and a surrounding region.